

A-E CONTRACTING BULLETIN 96-15, 10 DEC 96

SUBJECT: PROFIT

1. As you know, the weighted guidelines method (WGM) for profit on A-E contracts was revised in May 1995 as part of the total update of the EFARS. See EFARS 15.973-101. The new, simpler method has only three factors: technical complexity, contract length, and support of socioeconomic programs. The rationale for the change from the previous seven-factor method is attached if you are interested.

2. The profit rate is applied to the total of all estimated costs of the prime contractor and any subcontractors. Subcontractor costs are exclusive of any profit. Hence, the independent Government estimate (IGE) is not developed with redundant levels of profit (no profit on profit). This is because the EFARS alternate WGM for A-E contracts yields profits which are substantially greater than the general WGM in DFARS 215.971. Hence, estimating additional profit for layering of subcontractors is not warranted. Also, it doesn't make sense (or seem fair) that we would estimate a higher price for the same product for a firm that subcontracts a lot of the work compared to another firm that does everything in-house.

3. The above procedures apply to preparation of the IGE - not the A-E proposal. An A-E firm can compute and apply profit in any manner it want to in its proposal - even include prime contractor profit on subcontractor profit. (See FAR 15.901(c) and 15.903(e), and DFARS 215.903(e).). The Government negotiators should just be concerned with the total dollar amount of proposed profit in comparison with the IGE, not how the firm computes profit. Hence, don't tell an A-E firm that the Corps does not allow profit on profit.

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ALTERNATE STRUCTURED APPROACH TO WEIGHTED GUIDELINES METHOD (WGM) FOR PROFIT ON ARCHITECT-ENGINEER CONTRACTS

Analysis of Current Method: A complete review and updating of the EFARS is in progress. As a part of this task, the WGM for estimating profit for A-E contracts in EFARS 15.971(100) was reviewed. The current method has the following deficiencies:

- The method does not clearly relate to the three factors in DFARS 215.971-1 (performance risk, contract type risk and facilities capital employed) as required by DFARS 215.973(b)(1) when an alternate structured approach is used.
- The seven factors in EFARS 15.971(100) overlap; for example:
 - Technical complexity is reflected in both the "degree of risk" factor and the "relative difficulty of work" factor.
 - Government-furnished information is reflected in both the "contractor investment" factor and the "assistance by Government" factor.
 - Schedule is addressed in the "relative difficulty of work" factor and the "period of performance" factor.
 - Besides the "subcontracting" factor, subcontracting is also cited in three other factors: "degree of risk", "relative difficulty of work", and "contractor's investment". The specific influence of subcontracting on these three factors is not clear.
- The "subcontracting" factor allocates a decreasing profit percentage for increasing percentage of subcontracting. Nothing in DFARS 215.971 supports this logic. This model is unfair to small businesses who typically must subcontract to provide a full, multidiscipline team for a project. This profit structure also discourages large businesses from subcontracting with small and small disadvantaged firms, which is contrary to basic procurement policy.
- The method does not reward for support of Federal socioeconomic programs as required by FAR 15.905-1(c) and DFARS 215.971-2(e)(1)(iv).
- The "size of job" factor allocates a decreasing profit percentage for increasing contract price. This rationale is contrary to DFARS 215.971-3(b) which allows a working capital adjustment that increases with contract size.
- The "period of performance" factor is appropriate in accordance with DFARS 215.971-3(d)(1)(i) but has unreasonable time parameters. The profit factor maximizes at 180 days (6 months). Many A-E fixed-price contracts and delivery orders last 12-18

months or longer.

- It is not clear if the EFARS method is intended for all contract types, or just fixed-price.
- The base for applying the profit percentage is unclear.
- It is not reasonable that the same profit considerations would apply to both A-E and construction contracts.

Revised Method: A separate WGM should be developed for estimating profit for A-E firm-fixed-price contracts and delivery orders, as allowed by DFARS 215.903(b)(3)(i)(B). The general WGM in DFARS 215.971-1 should be used for cost-reimbursement A-E contracts, which are seldom used in USACE. The objectives in developing a new profit method are:

- Clearly base on factors in DFARS 215.971.
- Simplify factors and eliminate overlap.
- Reward for support of socioeconomic programs.
- Maintain approximately the same overall profit percentages (7% to 15%) in EFARS 15.971(100) since these profit levels have been found to attractive good firms and encourage quality work.

DFARS 215.973(b)(1) requires that any alternate structured approach shall consider the three basic components of profit in DFARS 215.971: performance risk, contract type risk and working capital adjustment, and facilities capital employed. Looking at each factor individually:

- Performance Risk. The three parts of this factor are technical complexity, degree of management effort required, and cost control. Cost control is not pertinent to a fixed-price action. Degree of management effort is closely related to the technical complexity and does not warrant separate consideration, with one exception. Contractor's support of Federal socioeconomic programs is listed as an element of management effort. This factor should be separated out to give it clear emphasis. Hence, the performance risk factor reduces to a primary element for technical complexity and a secondary element for support of socioeconomic programs.

-- Technical Complexity. This is the primary consideration in determining A-E profit. DFARS 215.971-2(c)(2) says an "alternate designated range" of 4% to 8% is appropriate for service contractors (such as A-E) which require relatively low capital investment compared to the defense industry overall. However, this range can be adjusted in an alternate structured approach. An increase in this range is justified due

to the long-term responsibility associated with A-E services. Using the current EFARS method as a guide, there are five factors closely related to technical complexity: degree of risk, relative difficulty of work, contractor's investment, assistance by Government, and subcontracting. These factors total 65% of the overall weighting, which when multiplied by the total EFARS profit range of 7% to 15%, gives a profit range for technical complexity of 4.55% to 9.75%. Round off to 5% to 10%. As desired, this range is somewhat above the DFARS alternate range of 4% to 8% for typical service contractors.

-- Support of Socioeconomic Programs. Use a range of 0% for no support to 2% for exceptional support. This level of additional profit would provide a reasonable incentive to encourage subcontracting with small and small disadvantaged businesses.

- Contract Type Risk and Working Capital Adjustment.

-- Contract Type Risk. DFARS 215.971-3(c) indicates a range of 2% to 4% for firm-fixed-price contracts with financing (progress payments). Length of contract is the most important consideration in DFARS 215.971-3(d)(1) relevant to A-E services. The nature and extent of subcontracted activity is also cited as a consideration. But it is appropriately covered by the technical complexity factor; the more complex the work, the more likely specialized portions must be subcontracted. Hence, the controlling contract risk factor for a firm-fixed-price A-E contracts with progress payments is the performance period. Use 2% for contract actions of 1 month or less, and increase linearly to 4% (0.1%/month) for actions of 21 months or more. Few A-E contract actions are longer than 21 months. Also, this will be a simple mathematical model to use. This length of contract (performance period) factor comprises a portion of the total profit which is comparable to the current EFARS method.

-- Working Capital Adjustment. This adjustment is only applied to fixed-price contracts with progress payments, such as A-E contracts. This adjustment is the product of three multipliers: cost financed by the contractor x length factor x interest rate. For an A-E contract, 90% progress payments (often more) are made; hence, the contractor finances 10% of the cost (.10). The table in DFARS 215.971-3(f)(2)(i) assigns a length factor of 0.40 for a performance period of 21 months or less, which encompasses the vast majority of A-E contracts and delivery orders. DFARS 215.971-3(b)(7) directs the use of an interest rate provided by the Secretary of the Treasury. For illustrative purposes, assume a rate of 5% (.05). Then, the working capital adjustment would be typically $0.1 \times 0.4 \times 0.05 = 0.002 = 0.2\%$. Therefore, the working capital adjustment for an A-E contract is negligible and can be excluded in developing an alternate WGM, especially since a higher range will be used for the technical complexity factor.

- Facilities Capital Employed. DFARS 215.971-2(c)(2) and 215.971-4(c)(3) state that profit for facilities capital will not be allowed if the alternate designated range for the performance risk factor is used. An alternate range (5% to 10%) is proposed for this

method that is even above the designated alternate range (4% to 8%). Hence, an additional factor for facilities capital employed is not warranted.

- Summary. The profit objective for firm-fixed-price A-E contracts and delivery orders is developed as follows:

- Technical complexity: 5% (low) to 10% (high).
- Length of contract: 2% (1 month or less) to 4% (21 months or longer).
- Support of socioeconomic programs: 0% (none) to 2% (exceptional).

Hence, the overall profit range is from 7% to 16%, which is comparable to the current EFARS range of 7% to 15% as desired.

- Cost Base. The general WGM in DFARS 215.971 states that the profit objective will be based on total contract costs, excluding general and administrative (G&A) expenses. However, EFARS 15.971(101) states that the profit base for the alternate WGM shall include G&A, which is based on a decision by the Office of the Assistant Secretary of Defense for Procurement and Logistics (attached). (The OASD(P&L) decision was only for A-E contracts but EFARS 15.971(101) would imply application to construction also. This should be clarified in the EFARS rewrite.) The OASD(P&L) policy correlates with the general practice in the A-E industry, and should be maintained in the EFARS. Excluding G&A from the cost base for profit would result in inadequate profit since a typical A-E firm has a payroll overhead of 40% and a G&A overhead of 120% (both expressed as a percentage of the direct labor costs).

The general DFARS WGM, as outlined on the DD Form 1547, Record of Weighted Guidelines Application, shows "subcontracts" as a part of the cost base for applying prime contract profit. Hence, it appears that subcontractors' profit is intended to be part of the cost base for applying profit in the general DFARS WGM. However, in this alternate WGM for A-E contracts, estimating redundant levels of profit on subcontracted work is not warranted since: (1) a higher range than the DFARS designated alternate range has been used for performance risk, and (2) profit is applied to G&A also. Hence, the alternate WGM profit percentage should be applied to the total estimated costs of the prime contractor and any subcontractors. By this approach, the profit objective (except for specific contractor's support of socioeconomic programs) is based on the characteristics of the work and not on the contractor's team arrangement.